

## AzurRx BioPharma, Inc.

(AZRX - NASDAQ)

### 3Q:18 Financial and Operational Summary

### OUTLOOK

Based on our DCF model and a 15% discount rate, AZRX is valued at approximately \$7.50 per share. Our model applies a 15% probability of eventual MS1819 sales for EPI based on historical Phase 2 success ratios. Our valuation includes geographic contributions from the US, and outside the US. We do not include any value for the preclinical AZX1103 program.

AzurRx employs recombinant protein technology to treat gastrointestinal diseases and microbiome related conditions using oral, non-systemic biologics. It currently has two programs in its pipeline.

The company is conducting a Ph2 trial for MS1819, an orally delivered, non-systemic, yeast-derived recombinant enzyme. The drug addresses EPI found in chronic pancreatitis or cystic fibrosis patients. A second compound, AZX1103, is preclinical and may see an IND filing in 2018 and Ph1 launch in 2019. It is being developed to prevent hospital acquired infections resulting from intravenous antibiotic administration.

In June 2018, AZRX announced a successful Ph2a in EPI for MS1819 in Australia, New Zealand and France and will launch a Ph2 for CF in late 4Q:18. AZRX holds sufficient capital to launch that Ph2 CF study.

We view AzurRx shares as undervalued, with substantial upside based on our market analysis. Our target price is \$7.50 per share and we believe that AZX1103 program can provide additional upside to our valuation if it progresses to the clinic.

Current Price (11/16/2018) **\$2.25**  
**Valuation** **\$7.50**

### SUMMARY DATA

52-Week High **4.08**  
 52-Week Low **2.10**  
 One-Year Return (%) **-22.4**  
 Beta **0.40**  
 Average Daily Volume (sh) **92,009**

Risk Level **Above Average**  
 Type of Stock **Small-Growth**  
 Industry **Med-Biomed/Gene**

Shares Outstanding (mil) **16.9**  
 Market Capitalization (\$mil) **38.0**  
 Short Interest Ratio (days) **0.86**  
 Institutional Ownership (%) **19.0**  
 Insider Ownership (%) **35.6**

Annual Cash Dividend **\$0.00**  
 Dividend Yield (%) **0.00**

5-Yr. Historical Growth Rates  
 Sales (%) **N/A**  
 Earnings Per Share (%) **N/A**  
 Dividend (%) **N/A**

P/E using TTM EPS **N/A**  
 P/E using 2018 Estimate **N/A**  
 P/E using 2019 Estimate **N/A**

Zacks Rank **N/A**

### ZACKS ESTIMATES

#### Revenue

(In millions of US\$)

	Q1	Q2	Q3	Q4	Year
	(Mar)	(Jun)	(Sep)	(Dec)	(Dec)
2017	\$0.0 A	\$0.0 A	\$0.0 A	\$0.0 A	\$0.0 A
2018	\$0.0 A	\$0.0 A	\$0.0 A	\$0.0 E	\$0.0 E
2019					\$0.0 E
2020					\$5.1 E

#### Earnings per Share

	Q1	Q2	Q3	Q4	Year
	(Mar)	(Jun)	(Sep)	(Dec)	(Dec)
2017	-\$0.29 A	-\$0.27 A	-\$0.28 A	-\$0.21 A	-\$1.05 A
2018	-\$0.29 A	-\$0.22 A	-\$0.15 A	-\$0.20 E	-\$0.83 E
2019					-\$0.74 E
2020					-\$0.47 E

## What's New

On November 9<sup>th</sup>, AzurRx BioPharma, Inc. (NASDAQ: AZRX) [filed](#) its third quarter 10-Q with the SEC for the three month period ending September 30, 2018. Highlights for the period and to date include participation in investment conferences, presentation of favorable trial data, acceptance of a new IND and a nod of approval from the Therapeutics Development Network for their cystic fibrosis trial protocol. Financial results for the quarter reflect the interim between the chronic pancreatitis study and the cystic fibrosis study.

Expenses for 3Q:18 were \$2.5 million, down 16% compared to the prior year. General and administrative expenses were \$1.3 million, contracting 34% compared to 3Q:17 levels. The change was attributable to a number of factors including a decrease of legal, accounting and other professional fees, timing differences related to the recording of bonuses and a reduction in non-cash compensation. Research and development expenses were up 21% compared to the prior year period as AzurRx established its R&D function in the United States and recognized related costs, but were down sequentially, representing a break between the CP and CF studies. Fair value adjustment, related to contingent consideration and the Protea Europe SAS acquisition increased and was recognized as an \$80,000 expense on the income statement. The value increased due to a rise in interest rates and a higher probability of ultimate success for MS1819 following the completion of the Phase IIa study for patients with chronic pancreatitis.

Cash on the balance sheet was \$4.4 million and debt fell to zero as of September 30, 2018 as the company extinguished its note payable and convertible debt. Cash burn in the quarter was (\$2.7) million for the third quarter and (\$7.6) million for the first nine months of the year.

### **Therapeutics Development Network (TDN) Recognition of CF Trial**

The Therapeutics Development Network (TDN), a group supported by the CF Foundation (CFF), [approved](#) of AzurRx's Phase II CF trial protocol for MS1819-SD. The TDN is a large network of physicians and experts in the United States that evaluate the safety and effectiveness of CF therapies investigated in clinical trials. The group is able to connect patients, investigators and sponsors to optimize clinical trial execution and generate critical data. Association with the group can help identify optimal study sites and identify enrollees to participate in the trial.

### **Investigational New Drug Application for Cystic Fibrosis**

On October 16<sup>th</sup> AzurRx [announced](#) that the FDA had accepted their investigational new drug application for the Phase II cystic fibrosis (CF) study. This follows the September 24 [release](#) promulgating the final [results](#) from the chronic pancreatitis trial. The FDA's sanction will allow the company to start the trial before year end in a ~30 patient blinded study which is expected to be complete by mid-year 2019. There will be several sites established in the United States and Europe in this effort led by Dr. Pennington. He and his team have developed strong relationships with candidates and CF organizations for the trial due to their experience running two other similar trials for Anthera (ANTH).

### **MS1819 CP Phase II in Cystic Fibrosis (CF)**

Dr. James Pennington, who was previously running Anthera's Phase III Sollpura program was added to the AzurRx team in May. His experience with the CF population makes him a particularly valuable asset to guide AzurRx through the next clinical trial steps. Dr. Pennington will also bring select members of his team to help advance MS1819 forward towards regulatory approval.

Dr. Pennington has already supervised a trial in a similar population to the one that will be examined in the CF trial, and was able to advance 127 patients in 17 months in the SOLUTION study and then another 140 patients in 11 months in the RESULT study at Anthera. The CF population, which will be examined in the study, is a much easier group to administer given the greater degree of focus on health management. This gives us greater confidence that AzurRx will be able to advance this candidate through these studies at a similar rate as was done with Sollpura.

## Year to Date Highlights

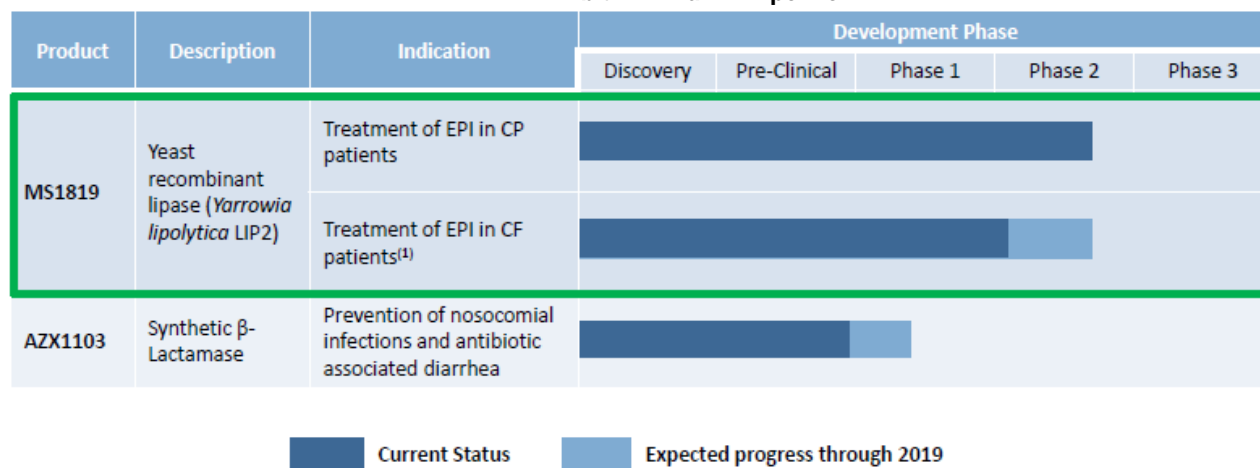
- MS1819
  - Phase IIa readout – 3Q:18
  - IND filing acceptance –4Q:18
  - Phase II in cystic fibrosis population launch – before year end 2018
  - Fully adjudicated data release from Phase IIa study – 2018/2019
  - Presentation of Phase IIa data at conference – 1H:19
- AZX1103
  - Proof of concept preclinical data – 1Q:18
  - Launch Phase I - 2019

## Company Assets

**MS1819**, is a yeast-derived lipase enzyme used to compensate for exocrine pancreatic insufficiency (EPI). The compound has several superior characteristics compared to standard EPI therapy, demonstrating increased efficacy in low pH environments and derivation from a non-porcine source. Currently MS1819 is being prepared for a second Phase II trial which we anticipate will launch before year end 2018.

**AZX1103** is AzurRx's second compound in development. This is a recombinant  $\beta$ -lactamase derived from a bacterial source to address hospital-acquired infections acquired as a result of antibiotic use. AZX1103 is a  $\beta$ -lactamase enzyme combination providing [evidence](#) of positive pre-clinical activity and degradation of amoxicillin in the presence of clavulanic acid in the upper gastrointestinal tract in the Gottingen minipig model. The candidate is in pre-clinical development and AzurRx plans to file an investigational new drug (IND) application in 2019. While the market opportunity is substantial, due to the early stage of development we do not attach any value to the  $\beta$ -lactamase program in our analysis.

Exhibit II – AzurRx Pipeline<sup>1</sup>



## Summary

AzurRx has completed its chronic pancreatitis trial and is about to launch its CF trial prior to year-end. The company has continued to achieve its milestones as they march forward towards a registrational trial. The results of the MS1819 Phase IIa trial confirmed the clinical activity of the drug and provided evidence of its safety while the acceptance of the IND will enable the launch of the Phase 2 study in CF. As a reminder, AZRX will pursue approval of MS1819 in the US and ex-US based on the specific details outlined in the company's licensing agreement. We maintain our target price of \$7.50 per share.

<sup>1</sup> Source: AZRX August 2018 Corporate Presentation

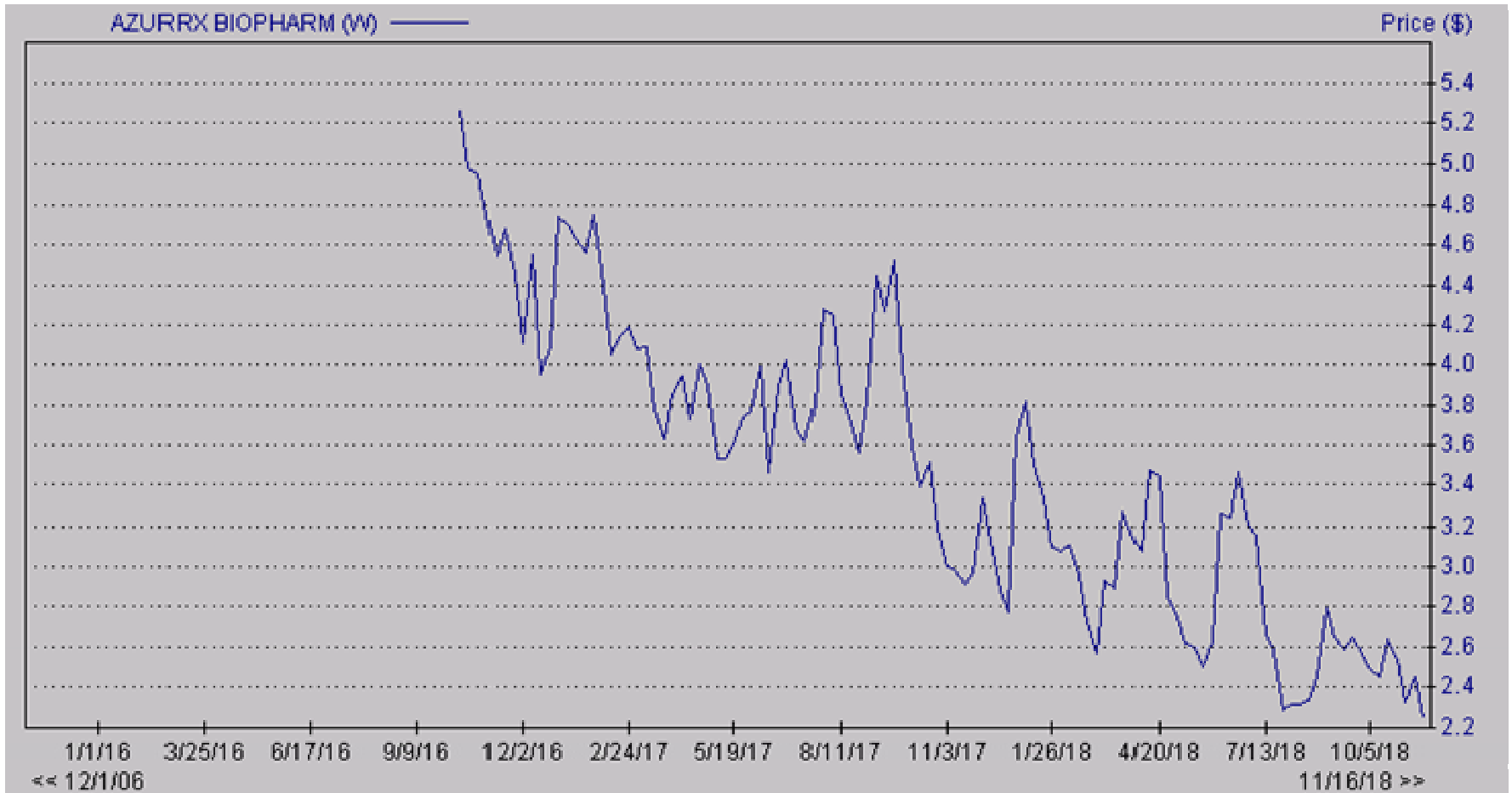
## PROJECTED FINANCIALS

### AzurRx BioPharma, Inc. - Income Statement

AzurRx Biopharma	2017 A	Q1 A	Q2 A	Q3 A	Q4 E	2018 E	2019 E	2020 E
<b>Total Revenues</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$5.1</b>
R&D	\$2.4	\$1.7	\$0.9	\$1.2	\$1.2	\$5.0	\$5.2	\$5.3
G&A	\$7.7	\$1.9	\$2.2	\$1.3	\$2.2	\$7.6	\$8.6	\$8.7
Other expenses	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Operating Income</b>	<b>(\$10.1)</b>	<b>(\$3.6)</b>	<b>(\$3.1)</b>	<b>(\$2.5)</b>	<b>(\$3.4)</b>	<b>(\$12.6)</b>	<b>(\$13.8)</b>	<b>(\$8.9)</b>
<i>Operating Margin</i>	-	-	-	-	-	-	-	-172.9%
Interest Expense	(\$0.9)	(\$0.0)	(\$0.0)	(\$0.0)	(\$0.2)	(\$0.3)	\$0.0	\$0.0
Fair Value Adjustment	(\$0.1)	\$0.0	(\$0.2)	(\$0.1)	\$0.0	(\$0.2)	\$0.0	\$0.0
Total Other Income	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Pre-Tax Income</b>	<b>(\$11.1)</b>	<b>(\$3.6)</b>	<b>(\$3.3)</b>	<b>(\$2.6)</b>	<b>(\$3.6)</b>	<b>(\$13.1)</b>	<b>(\$13.8)</b>	<b>(\$8.9)</b>
Taxes & Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<i>Tax Rate</i>	0%	0%	0%	0%	0%	0%	0%	0%
<b>Net Income</b>	<b>(\$11.1)</b>	<b>(\$3.6)</b>	<b>(\$3.3)</b>	<b>(\$2.6)</b>	<b>(\$3.6)</b>	<b>(\$13.1)</b>	<b>(\$13.8)</b>	<b>(\$8.9)</b>
<b>Reported EPS</b>	<b>(\$1.05)</b>	<b>(\$0.29)</b>	<b>(\$0.22)</b>	<b>(\$0.15)</b>	<b>(\$0.20)</b>	<b>(\$0.83)</b>	<b>(\$0.74)</b>	<b>(\$0.47)</b>
<i>YOY Growth</i>	-	-	-	-	-	-	-	-
Shares Outstanding	10.6	12.4	15.3	16.9	18.2	15.7	18.7	19.0

Source: Company Filing // Zacks Investment Research, Inc. Estimates

# HISTORICAL STOCK PRICE



---

## DISCLOSURES

The following disclosures relate to relationships between Zacks Small-Cap Research (“Zacks SCR”), a division of Zacks Investment Research (“ZIR”), and the issuers covered by the Zacks SCR Analysts in the Small-Cap Universe.

### ANALYST DISCLOSURES

I, John Vandermosten, hereby certify that the view expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report. I believe the information used for the creation of this report has been obtained from sources I considered to be reliable, but I can neither guarantee nor represent the completeness or accuracy of the information herewith. Such information and the opinions expressed are subject to change without notice.

### INVESTMENT BANKING AND FEES FOR SERVICES

Zacks SCR does not provide investment banking services nor has it received compensation for investment banking services from the issuers of the securities covered in this report or article.

Zacks SCR has received compensation from the issuer directly or from an investor relations consulting firm engaged by the issuer for providing non-investment banking services to this issuer and expects to receive additional compensation for such non-investment banking services provided to this issuer. The non-investment banking services provided to the issuer includes the preparation of this report, investor relations services, investment software, financial database analysis, organization of non-deal road shows, and attendance fees for conferences sponsored or co-sponsored by Zacks SCR. The fees for these services vary on a per-client basis and are subject to the number and types of services contracted. Fees typically range between ten thousand and fifty thousand dollars per annum. Details of fees paid by this issuer are available upon request.

### POLICY DISCLOSURES

This report provides an objective valuation of the issuer today and expected valuations of the issuer at various future dates based on applying standard investment valuation methodologies to the revenue and EPS forecasts made by the SCR Analyst of the issuer’s business.

SCR Analysts are restricted from holding or trading securities in the issuers that they cover. ZIR and Zacks SCR do not make a market in any security followed by SCR nor do they act as dealers in these securities. Each Zacks SCR Analyst has full discretion over the valuation of the issuer included in this report based on his or her own due diligence. SCR Analysts are paid based on the number of companies they cover. SCR Analyst compensation is not, was not, nor will be, directly or indirectly, related to the specific valuations or views expressed in any report or article.

### ADDITIONAL INFORMATION

Additional information is available upon request. Zacks SCR reports and articles are based on data obtained from sources that it believes to be reliable, but are not guaranteed to be accurate nor do they purport to be complete. Because of individual financial or investment objectives and/or financial circumstances, this report or article should not be construed as advice designed to meet the particular investment needs of any investor. Investing involves risk. Any opinions expressed by Zacks SCR Analysts are subject to change without notice. Reports or articles or tweets are not to be construed as an offer or solicitation of an offer to buy or sell the securities herein mentioned.